

REMARKS

Claims 1-26, 30-35, and 58 are pending. Applicants respectfully request reconsideration and reexamination of the pending claims.

Applicants gratefully acknowledge the brief telephone interview granted by the Examiner in late September with Applicants' representative, Jonathan Hallman. In this interview, Applicants discussed the new matter rejection with the Examiner and agreed to remove the thickness limitations from the claims to overcome the new matter rejections. In that regard, Applicants have amended the specification with text from U.S. Ser. No. 09/652,975, which Applicants had incorporated by reference in its entirety on page 7, lines 10 through 12 of the specification. Specifically, the paragraph beginning on page 2, line 26 has been amended with three paragraphs taken verbatim from the '975 application beginning on page 3, lines 7 through 29 of the '975 application. This additional material helps further explain the operation of what is meant by prior art "second-surface" optical disks as opposed to the claimed inventive "first-side" optical disks. In particular, the additional material describes how the relatively thick substrate of a second-surface disk helps defocus dust particles that overlay this relatively thick substrate with respect to a laser beam that passes through the substrate to reach underlaying information layers. As shown, for example, by Applicants Figure 3, the claimed first-side optical disks have no such relatively thick substrate that acts to defocus dust particles. Instead, the information layers may be overlaid by a relatively thin optical coupling layer (for example, 80 nm in thickness, see page 8, line 2). Those of ordinary skill in the art will readily appreciate that this thickness, which is not even a single wavelength in thickness with respect to visible light, cannot possibly function to defocus any dust particles. In other words, dust particles laying on such an optical coupling

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layer would be read along with the data from the underlaying information layers. Applicants, however, are willing to abide with such degradation because of the beneficial advantages gained by not having a relatively thick substrate overlaying the information layers: namely, the lack of optical aberrations mentioned in page 2 of the specification. Accordingly, the description of second-surface optical disks and Figure 3, for example, provide written support for the limitation of claim 1 that the recited optical disk be "distinguished from second-surface optical disks by the absence of an additional substrate overlaying the second metal/alloy layer having a thickness sufficient to defocus dust particles with respect to a laser beam reading either the first or second metal/alloy layer without passing through the single substrate."

In contrast to claim 1, the following prior art cited by the Examiner teaches the use of multiple-substrate optical disks. For example, consider the Takeda reference, USP 6,210,609. As discussed with respect to Figures 3 and 12 in Col. 4, lines 40 through 50 protective coatings 102 are formed by first coating the disk with liquid light-curing resin that is sandwiched by glass plates, then the disk is spun at high speed and subjected to UV light to cure the resin. As is known in the art, such a process produces relatively thick coatings that function to defocus dust particles lying on the surface of the protective coatings with respect to the underlying information-containing layers. Thus, although they are denoted as "protective layers" these layers function as substrates, providing additional rigidity and support to the disk.

The Nishiuchi reference [USP 5,764,619] adds nothing further. Substrates 1 and 3 overlay information layers 2 and 4. Accordingly, Nishiuchi teaches away from the "single substrate" limitation recited in claim 1.

The Holster reference [USP 4,450,553], as seen in Figure 1 and discussed in Col. 9, line 52 through Col. 10, line 16, discloses an optical disk having a 1 mm thick substrate 1. On

opposing surfaces of the substrate are formed reflection layers 5. As seen in Figure 1, the disk is configured such that the reflection layers are read by a laser beam that passes through the substrate. As such, it is similar to a "multiple substrate" approach in that dust particles on the surface of one reflection layer will be out-of-focus with respect to a laser beam passing through the substrate that is focused on the opposing reflection layer. This approach is quite different from the "one-side" configuration recited in claim 1 and teaches away from the "optical coupling layer" limitation recited therein. The Nakahara, Sugita, and Allebest references add nothing further as they do nothing to cure the infirmities of either Takeda, Holster or Wilting.

In view of the above discussion, Applicant respectfully submits that claim 1 is patentable over these references used individually or in combination. Because claims 2 through 11, 18 through 26, and 30 through 34, and 58 depend either directly or indirectly on these references, they are patentable for at least the same reasons. In view of the Applicants' amendments to claim 1, the relevance of the other references cited by the Examiner (Gotoh and Mumford) is mooted because they provide nothing further to correct the deficiencies in the previously-discussed references.

Claim 12 has been amended in an analogous fashion to claim 1. No new matter has been added. Accordingly, it is patentable over the Holster, Fujimori, Ueno, Takeda, Kobayashi, Nishiuchi, and Saito references for at least the same reasons as discussed with respect to Claim 1. Because claims 13 through 17 depend either directly or indirectly on claim 12, they are patentable for at least the same reasons. In view of the Applicants' amendments to claim 12, the relevance of the other references cited by the Examiner (Nakahara, Sugita, Pan, and Allebest) is mooted because they provide nothing further to correct the deficiencies in the previously-discussed references.

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Claim 35 has been amended in accordance with the amendments to claim 1.

Accordingly, it is patentable over the Holster, Fujimori, Ueno, Takeda, Kobayashi, Nishiuchi, and Saito references because they provide no suggestion to provide such an apparatus, let alone suggest a method of using such an apparatus.

In addition, the specification has been amended to address a typographical error with respect to the filing date of the '975 application.

CONCLUSION

For the above reasons, pending Claims 1-26 and 30-35 are in condition for allowance and allowance of the application is hereby solicited. If the Examiner has any questions or concerns, a telephone call to the undersigned at (949) 752-7040 is welcomed and encouraged.

I hereby certify that this correspondence is facsimile transmitted to the Commissioner for Patents, Alexandria, VA 22313-1450, at 703-872-9306, on January 5, 2004.



Eric Hoover

January 5, 2004
Date of Signature

Respectfully submitted,



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